# ZN-NH22XE Quick User Guide

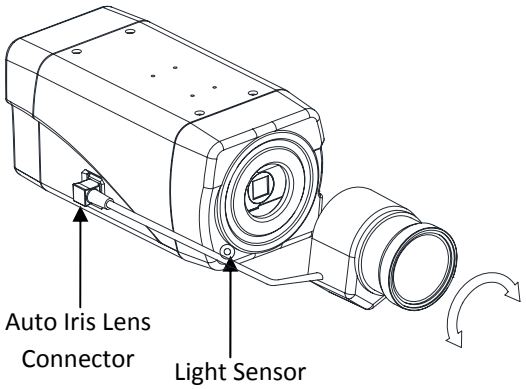
This manual has been designed to guide you through basic installation, configuration and the webpage access settings of the device.

## Step1. Install the lens

1. Place the lens mount to the camera and tighten the mount by turning clockwise.

2. Connect the lens cable to the 4-pin auto iris connector on the side of the camera.

3. Manually adjust the zoom and focus of the image with the zoom lever and focus lever on the lens mount. (Refer to the manual provided with your lens.)

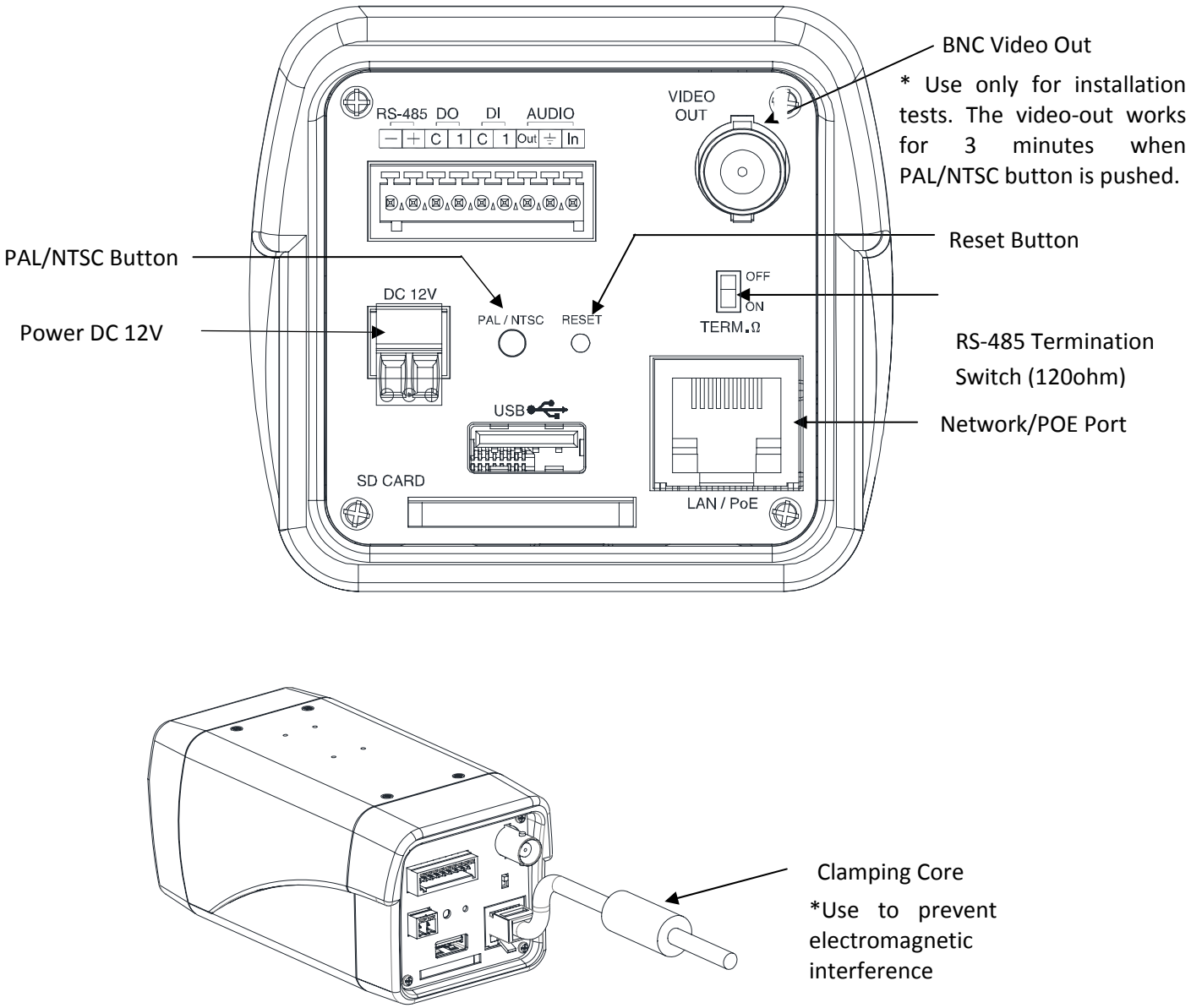



| | |
|---|---|
| ! Caution | Make sure that the light sensor is not blocked by lens cable or other objects. |

## Step2. Connect cables

Connect proper cables to the device. To see the correct positions of all connectors, refer to the following image below.

* Model design and appearance are subject to change without any prior notice.




**NOTE.** When you want to check the video output on an analog monitor at the installation site, make sure to set the output configuration switch to NTSC or PAL according to the video standard.

| | | |
|---|---|---|
| ! Caution | The device is polarity sensitive. Incorrect power connection may cause malfunction or damage to the IP device. | Power Adaptor Connector (DC 12V)  |

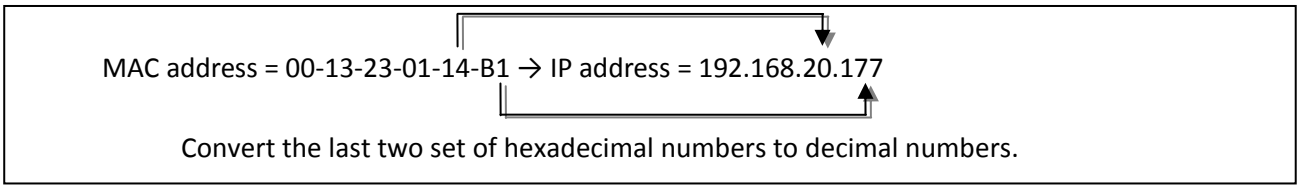
## Step3. Set up network environment

The default IP address of the device is 192.168.XXX.XXX. Users can identify the IP address of the device from converting the MAC address's hexadecimal numbers, which is attached to the device. Be sure that the device and PC are on a same area network before running the installation.

## Generic IP Environment

In case of generic private network environment where IP address 192.168.XXX.XXX are used, users may view the live streaming images on a web page using the device's default IP address:

1. Convert the device's MAC address to the IP address. Refer to the Hexadecimal-Decimal Conversion Chart at the end of the manual.
   (The MAC address of the device is attached on the side or bottom of the device.)




2. Start the Microsoft® Internet Explorer web browser and enter the IP address of the device.

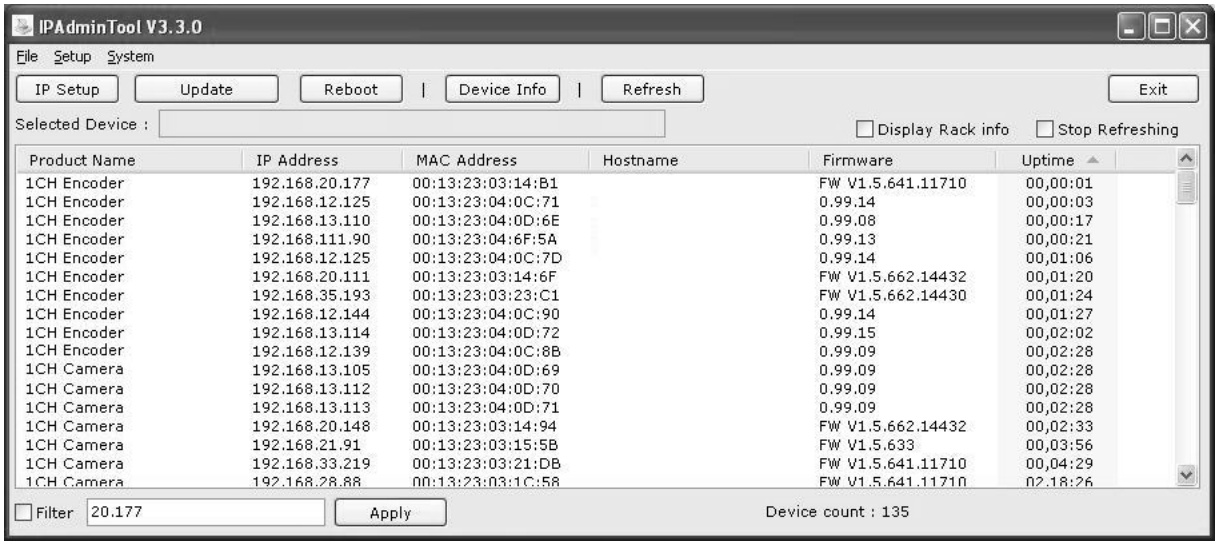
3. Web streaming and device configurations are supported through ActiveX program. When the ActiveX installation pop-up window appears, authorize and install the ActiveX setup.exe.

## Custom IP Environment

IPAdminTool is provided with SDK at the following SDK path.

{SDK root}\BIN\TOOLS\AdminTool\

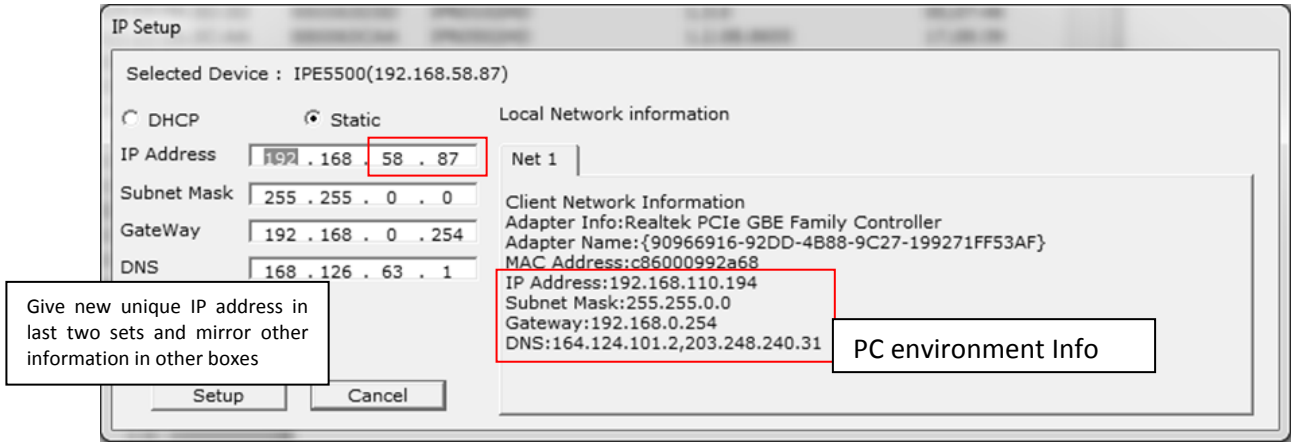
IPAdminTool is a management tool, which automatically scans all of the network products for users to perform administrative tasks, which includes network configurations, firmware update, device reboot, and device organizations.




To modify the device's default IP address for customized network area;

1. Find the device from the IPAdminTool's list and highlight the device's name.

2. Right-click the mouse and select “IP Address”; IP Setup window appears.




3. In the IP Setup’s window, information under ‘Local Network information’ displays the user/PC’s network area information. Those information need to be incorporated to the IP Address, Subnet Mask, Gateway, and DNS boxes, except the last 2 sets of IP Address, which are to be the unique numbers for the device. Refer to the image above for the setting

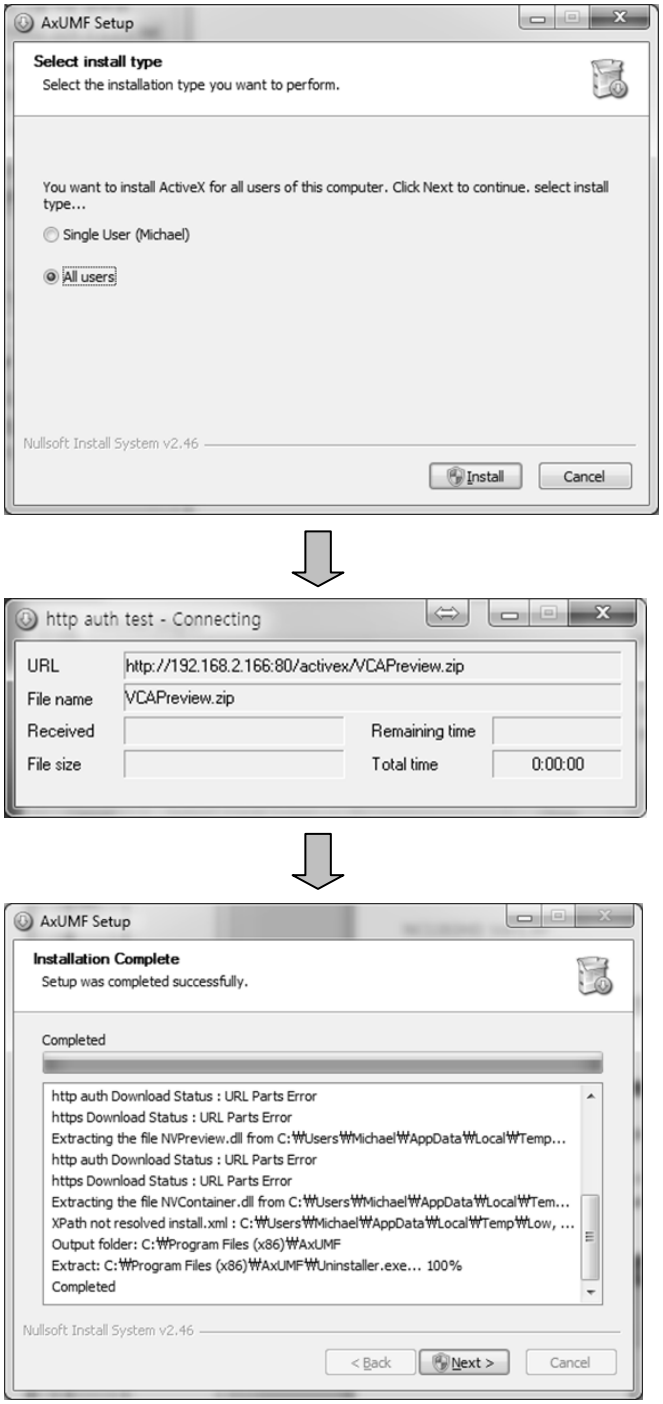
4. Click ‘Setup’ to complete the modification.

## Step4. View video on web page

Once the device has the proper IP address, users can view the live streaming images through a web browser.

1. Type the correct IP address in the Microsoft® Internet Explorer
   If popup window appears and ask for user name and password, type *root / pass.*

2. Grant the AxUMF.cab setup and proceed with installations.




3. Follow the instructions of the dialog boxes and complete the installation. Once the installation is complete, the video stream is displayed in the main view frame.
   If user doesn't install ActiveX, the jpeg image is shown in a main view frame instead.

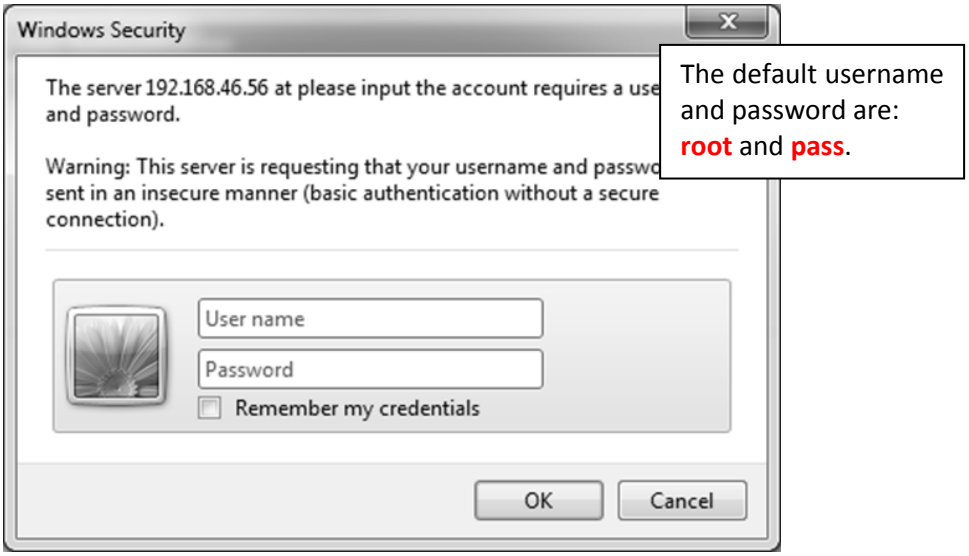
**Caution**

If "*This software requires the Microsoft XML Parser V6 or higher. Please download MSXML6 from the Microsoft website to continue. Error code: Cannot create XMLDOMDocument.*" message appears, download and install the Microsoft Core XML Services (MSXML) 6.0.

## Step5. Setting IP Address

To set up the Network configuration:

1. Click **Setup** on the upper right of the web page. The login page is displayed as below.
2. Enter the default user name (root) and the default password (pass), and then select **OK**.


Windows Security
The server 192.168.46.56 at please input the account requires a use
and password.
Warning: This server is requesting that your username and passwo
sent in an insecure manner (basic authentication without a secure
connection).
User name
Password
Remember my credentials
OK
Cancel
The default username and password are: root and pass.

3. Click **Network Configuration** on the left of the **Setup** page, and then select **TCP/IP** menu.
4. Input the data for the IP address configuration, and click the **Apply** button on the bottom of the page.

When modifying the IP address, be advised to have the correct Subnet mask and Gateway ready. To use DHCP, select **Obtain an IP address via DHCP**.

To learn how to set up the web page for advanced configuration, refer to the Web Page User's Manual, which is available on the SDK at the following path.

{SDK root}\DOC\

## Rebooting

Reset can be carried out as follows:

1. Use a pointed object to push the reset button for 1~2 seconds.
2. Wait for the system to reboot.

## Resetting to the Factory Default Settings

Resetting the device to the factory default will reset all configured parameters to the initial factory settings.
To perform the Factory Default settings:

1. Use a pointed object to push the reset button and hold for 5 seconds.
2. Release the Reset button.
3. Wait for the system to reboot.

## More Information

To learn more about using other features of your devices, refer to the manual, which is available on the SDK at the following path.

```
{SDK root}\DOC\
```

# Hexadecimal-Decimal Conversion Table

Refer to the following table when you convert the MAC address of your device to IP address.

| Hex | Dec |
|---|---|
| 00 | 0 |
| 01 | 1 |
| 02 | 2 |
| 03 | 3 |
| 04 | 4 |
| 05 | 5 |
| 06 | 6 |
| 07 | 7 |
| 08 | 8 |
| 09 | 9 |
| 0A | 10 |
| 0B | 11 |
| 0C | 12 |
| 0D | 13 |
| 0E | 14 |
| 0F | 15 |
| 10 | 16 |
| 11 | 17 |
| 12 | 18 |
| 13 | 19 |
| 14 | 20 |
| 15 | 21 |
| 16 | 22 |
| 17 | 23 |
| 18 | 24 |
| 19 | 25 |
| 1A | 26 |
| 1B | 27 |
| 1C | 28 |
| 1D | 29 |
| 1E | 30 |
| 1F | 31 |
| 20 | 32 |
| 21 | 33 |
| 22 | 34 |
| 23 | 35 |
| 24 | 36 |

| Hex | Dec |
|---|---|
| 25 | 37 |
| 26 | 38 |
| 27 | 39 |
| 28 | 40 |
| 29 | 41 |
| 2A | 42 |
| 2B | 43 |
| 2C | 44 |
| 2D | 45 |
| 2E | 46 |
| 2F | 47 |
| 30 | 48 |
| 31 | 49 |
| 32 | 50 |
| 33 | 51 |
| 34 | 52 |
| 35 | 53 |
| 36 | 54 |
| 37 | 55 |
| 38 | 56 |
| 39 | 57 |
| 3A | 58 |
| 3B | 59 |
| 3C | 60 |
| 3D | 61 |
| 3E | 62 |
| 3F | 63 |
| 40 | 64 |
| 41 | 65 |
| 42 | 66 |
| 43 | 67 |
| 44 | 68 |
| 45 | 69 |
| 46 | 70 |
| 47 | 71 |
| 48 | 72 |
| 49 | 73 |

| Hex | Dec |
|---|---|
| 4A | 74 |
| 4B | 75 |
| 4C | 76 |
| 4D | 77 |
| 4E | 78 |
| 4F | 79 |
| 50 | 80 |
| 51 | 81 |
| 52 | 82 |
| 53 | 83 |
| 54 | 84 |
| 55 | 85 |
| 56 | 86 |
| 57 | 87 |
| 58 | 88 |
| 59 | 89 |
| 5A | 90 |
| 5B | 91 |
| 5C | 92 |
| 5D | 93 |
| 5E | 94 |
| 5F | 95 |
| 60 | 96 |
| 61 | 97 |
| 62 | 98 |
| 63 | 99 |
| 64 | 100 |
| 65 | 101 |
| 66 | 102 |
| 67 | 103 |
| 68 | 104 |
| 69 | 105 |
| 6A | 106 |
| 6B | 107 |
| 6C | 108 |
| 6D | 109 |
| 6E | 110 |

| Hex | Dec |
|---|---|
| 6F | 111 |
| 70 | 112 |
| 71 | 113 |
| 72 | 114 |
| 73 | 115 |
| 74 | 116 |
| 75 | 117 |
| 76 | 118 |
| 77 | 119 |
| 78 | 120 |
| 79 | 121 |
| 7A | 122 |
| 7B | 123 |
| 7C | 124 |
| 7D | 125 |
| 7E | 126 |
| 7F | 127 |
| 80 | 128 |
| 81 | 129 |
| 82 | 130 |
| 83 | 131 |
| 84 | 132 |
| 85 | 133 |
| 86 | 134 |
| 87 | 135 |
| 88 | 136 |
| 89 | 137 |
| 8A | 138 |
| 8B | 139 |
| 8C | 140 |
| 8D | 141 |
| 8E | 142 |
| 8F | 143 |
| 90 | 144 |
| 91 | 145 |
| 92 | 146 |
| 93 | 147 |

| Hex | Dec |
|---|---|
| 94 | 148 |
| 95 | 149 |
| 96 | 150 |
| 97 | 151 |
| 98 | 152 |
| 99 | 153 |
| 9A | 154 |
| 9B | 155 |
| 9C | 156 |
| 9D | 157 |
| 9E | 158 |
| 9F | 159 |
| A0 | 160 |
| A1 | 161 |
| A2 | 162 |
| A3 | 163 |
| A4 | 164 |
| A5 | 165 |
| A6 | 166 |
| A7 | 167 |
| A8 | 168 |
| A9 | 169 |
| AA | 170 |
| AB | 171 |
| AC | 172 |
| AD | 173 |
| AE | 174 |
| AF | 175 |
| B0 | 176 |
| B1 | 177 |
| B2 | 178 |
| B3 | 179 |
| B4 | 180 |
| B5 | 181 |
| B6 | 182 |
| B7 | 183 |
| B8 | 184 |

| Hex | Dec |
|---|---|
| B9 | 185 |
| BA | 186 |
| BB | 187 |
| BC | 188 |
| BD | 189 |
| BE | 190 |
| BF | 191 |
| C0 | 192 |
| C1 | 193 |
| C2 | 194 |
| C3 | 195 |
| C4 | 196 |
| C5 | 197 |
| C6 | 198 |
| C7 | 199 |
| C8 | 200 |
| C9 | 201 |
| CA | 202 |
| CB | 203 |
| CC | 204 |
| CD | 205 |
| CE | 206 |
| CF | 207 |
| D0 | 208 |
| D1 | 209 |
| D2 | 210 |
| D3 | 211 |
| D4 | 212 |
| D5 | 213 |
| D6 | 214 |
| D7 | 215 |
| D8 | 216 |
| D9 | 217 |
| DA | 218 |
| DB | 219 |
| DC | 220 |
| DD | 221 |

| Hex | Dec |
|---|---|
| DE | 222 |
| DF | 223 |
| E0 | 224 |
| E1 | 225 |
| E2 | 226 |
| E3 | 227 |
| E4 | 228 |
| E5 | 229 |
| E6 | 230 |
| E7 | 231 |
| E8 | 232 |
| E9 | 233 |
| EA | 234 |
| EB | 235 |
| EC | 236 |
| ED | 237 |
| EE | 238 |
| EF | 239 |
| F0 | 240 |
| F1 | 241 |
| F2 | 242 |
| F3 | 243 |
| F4 | 244 |
| F5 | 245 |
| F6 | 246 |
| F7 | 247 |
| F8 | 248 |
| F9 | 249 |
| FA | 250 |
| FB | 251 |
| FC | 252 |
| FD | 253 |
| FE | 254 |
| FF | 255 |
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| | |